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RJV R90
JAB
ADP

17 April 1969

MEMORANDUM FOR THE RECORD

SUBJECT: Meetings of the Automap Data Bank
Study Group, 9 and 16 April 1969

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1. [REDACTED] met on 9 April 1969 for the purpose of resolving the problem of overall data organization. It was agreed that because of the eventual size of Data Banks II and III, separation of the data was desirable for retrieval purposes. Grouping could be based on either continental areas, grid squares, or overlapping areas. Any system would require a master, but the overlap alternative could only be generated by a master file based on continent or grid squares. Inasmuch as the present input is continental and the other alternatives can be derived from it, the continental area was chosen for separating the input in the master data bank. Therefore, each continental area will be stored on a separate storage medium. Further, it was decided to subdivide on that medium each area into its file elements--coastlines, rivers, international boundaries, and cities. Other elements, used less frequently, such as transportation and internal boundaries could optionally be placed on the same or subsequent media. The Asian regions now being digitized will be arranged in the above manner. When coverage is sufficient, sample files arranged by grid squares and overlapping areas will be derived from the master file and tested along with the original to determine the optimum system for retrieval.

Marked for further investigation were the feasibility of discontinuing the use of the first digit for designation of continental area, possible subdivision of Asia, and the inclusion of the index for each area with the data bank for that area. At the close of the session, it was decided that the undersigned would undertake the implementation of the above in conjunction with OCS.

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2. A working group composed of [REDACTED] met on 16 April. The results of the meeting described in Paragraph 1. were reviewed and clarified. Cited as a solvable problem in the proposed scheme were conterminous line segments such as boundaries and rivers. Attention was also directed to the fact that the type of storage medium was not specified. After much discussion it was decided to recommend magnetic tape for storage and add a type drive to the proposed configuration. This appears to be the best answer for our storage, retrieval, and processing requirements. The need for large, expensive storage is eliminated, retrieval is immensely simplified, and many of the processing requirements can be shifted to the small computer.

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Excluded from automatic downgrading and declassification

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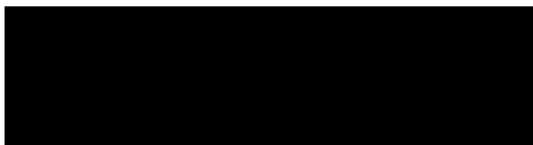
and a line printer had been added to the proposed configurations in discussions between SAD/OCS and IBM representatives (see attachment). The OER interest in a card reader/punch was mentioned and it was decided that the topic was a matter for separate negotiation with that component. [REDACTED] announced that a trial search of Data Bank I (Format 1) took 2.7 minutes total processing time for a map frame that included neither coastlines nor boundaries.

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Moving to format, the group decided to code in binary and define position in radians. For updating reasons, the identifier will be retained with each point and the scale factor (rank or sub-element) will be added to the format. The latter item combined with the separation of file elements will eliminate the need for a separate index. [REDACTED] will work out the exact details. Another decision will eliminate the need to reserve the first digit of the six-digit identifier for continent. Dispersal of data onto separate tapes permits this move. However, the numbers 8 and 9 in this position must be reserved for error and end of file signals. Handling of the continental areas was the last topic. Because of the smallness of the Antarctica file and overlap with the South American, African, and Australasian files, it was deemed best to combine it with each of those three areas and eliminate Antarctica as a separate entity. Asia was cited as a special problem because of the relative amount of data as compared to other continental areas. The undersigned will determine the relative percentages of points in Data Bank I to obtain a meaningful basis for subdivision.

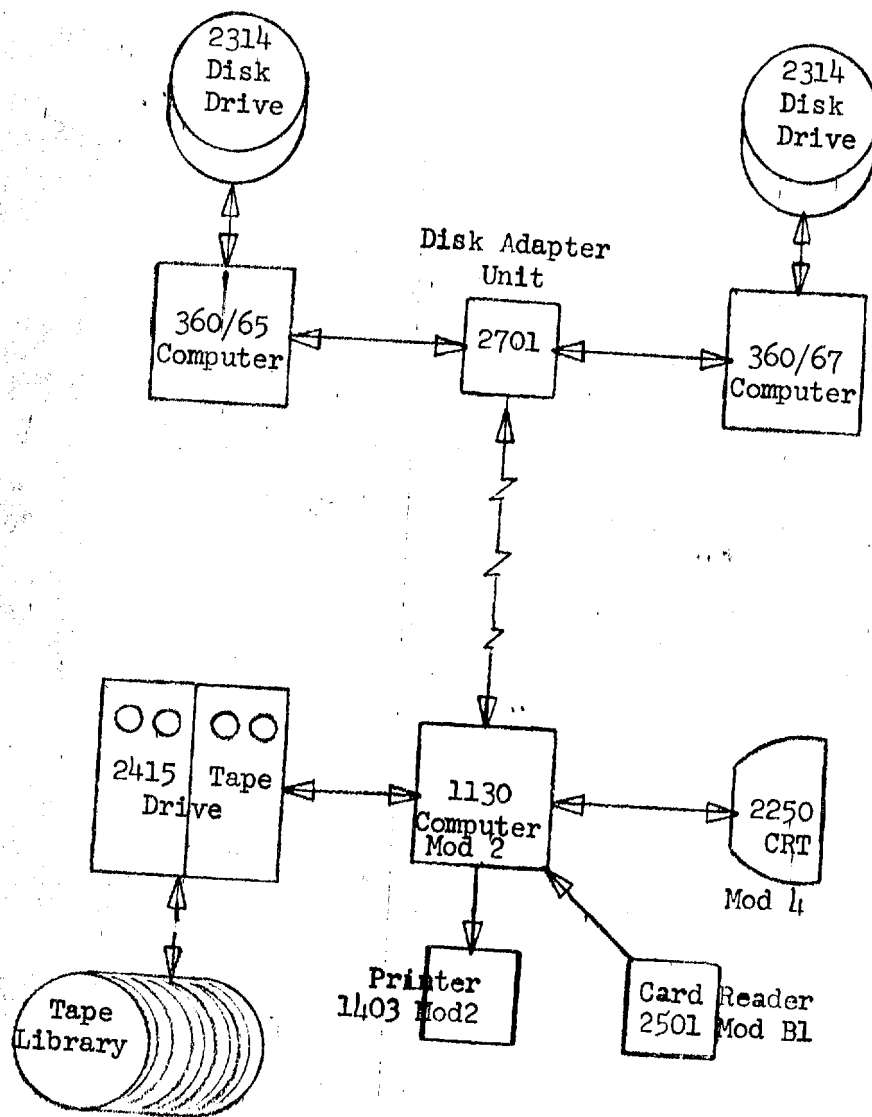
3. The next meeting will be Friday, April 25th in Room 2E-62 at 10:00 A.M.

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PROPOSED CONFIGURATION

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